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- 1-17. (CANCELED).
- 18. (CURRENTLY AMENDED) A method for oxidizing an inorganic species 
  other than iron(II) arsenic, manganese, cerium or uranium in an aqueous solution 
  comprising the steps of:
- (i) supplying an oxidizable source of sulphur as a photoabsorber, and oxygen to the solution; and
- (ii) irradiating the solution with UV light such that the species arsenic, manganese, cerium or uranium is oxidized.
- 19. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the oxidizable source of sulphur is chosen from the group consisting of one or more of  $SO_3^2$ ,  $SO_2(g)$ , aqueous  $SO_2$ ,  $HSO_3^-$ ,  $S_2O_3^{2-}$  and  $S_4O_6^{2-}$ .
- 20. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the inorganic species is present in the aqueous solution in trace quantities.
- 21. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the inorganic species is chosen from the group consisting of one or more of arsenic manganese, cerium, selenium, cyanide, nickel, vanadium and uranium.
- 22. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the wavelength of UV light is less than 300 nm.
- 23. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the oxygen supplied to the solution is derived from air.
- 24. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the oxygen supplied to the solution has a partial pressure of about 0.2 atmospheres.
- 25. (PREVIOUSLY PRESENTED) The method as claimed in claim 18, wherein the aqueous solution is one of: drinking water, industrial waste water, or an industrial process liquor.

## 26-29. (CANCELED)

- 30. (NEW) A method of oxidizing at least one of arsenic, manganese, cerium and uranium in an aqueous solution, the method comprising the steps of:
- (i) supplying an oxidizable source of sulphur as a photoabsorber to the solution;
  - (ii) supplying oxygen to the solution; and

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(iii) irradiating the solution with UV light such that oxidation of at least one of the arsenic, manganese, cerium and uranium occurs.

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